



Intro

Tableau is a very powerful and popular application that allows you to easily visualize and analyze vast sets of data. With a large online and helpful community, it is easier than ever to learn and develop the skills of data analyzation using Tableau.

Choose A Track

Learn Through a Course

1. While we do not recommend having to take a structured course, if you feel it is necessary to do so there are many good online courses that can be paid for to learn Tableau.
2. If you choose to take a structured course, we recommend many of the available courses that can be offered on the popular LinkedIn Learning platform.

Pick it up and learn Through Project Experience

1. Through the Lehigh Data Science Track students will learn Tableau through several free and open sources provided by the large Tableau community, as well as starting their own projects or joining a team already in the process of one.
2. Through experiential learning and self-exploration, students will learn Tableau to be able to meet the requirements of their chosen projects, and provide advanced data insight for the projects at hand.
3. Due to the experiential nature of this track, it is important to stay proactive during the process. What you put into the experience is what you will get, so try to stay on top of things and you will be using Tableau in no time.

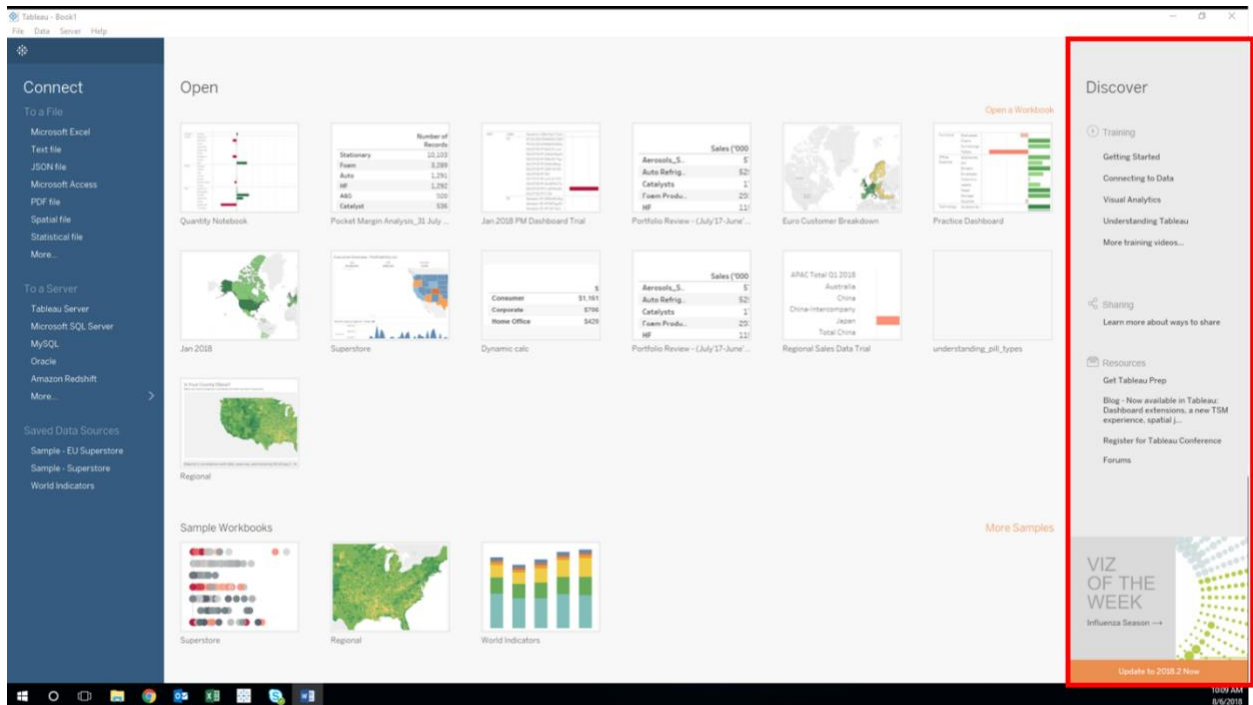
First Steps

Initial Download

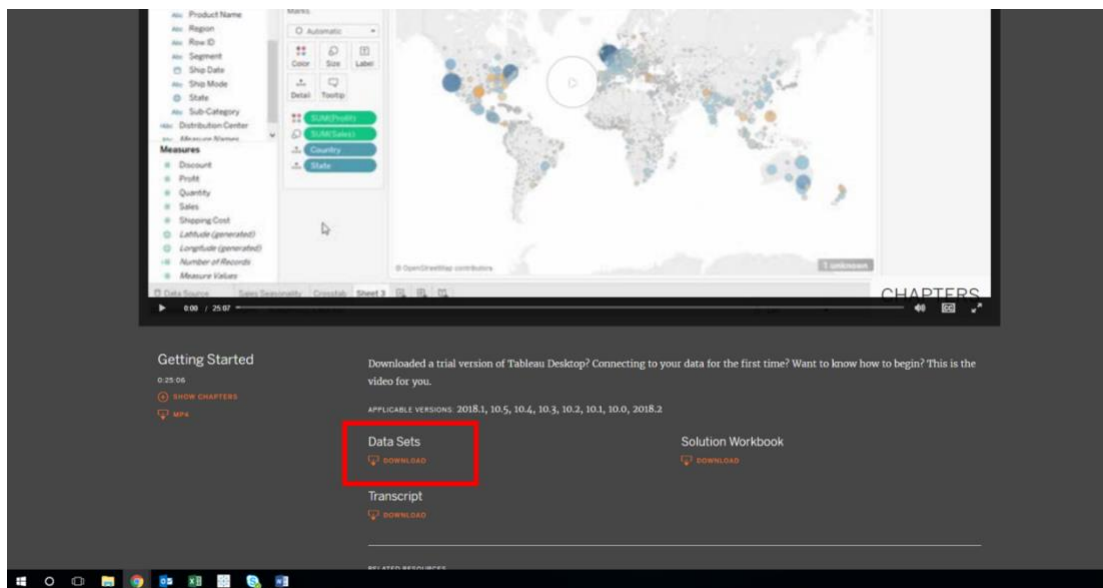
1. Go to the following link: <https://www.tableau.com/academic/students> and download Tableau for students free for a year.
2. Make sure you properly install Tableau and that is running properly.

Getting Started with Tableau

1. Open up your newly installed Tableau desktop application and direct your attention to the discover banner on the right side of opening screen.



2. Start out watching Tableau's provided training videos and start familiarizing yourself with Tableau's interface and capabilities.
3. Download sample data sets, and follow along with the videos manipulating your own data set following along with the videos.
 - a. Data sets that correspond with videos can be found in the description of the videos.



2. Get a feel for how Tableau works, get a good understanding of the differences between things like pill types, calculated fields, parameters and the core features of how Tableau works.

Experiential Learning

Your First Project

1. Once you have a feel with how Tableau works, and have worked with some of the sample datasets Tableau provides, it's time to start applying what you've learned.
2. This step of the track is where you will do most of your learning and it is largely self-led. For this reason, it can become frustrating, but if you stick through it you will be rewarded greatly.

Starting Your Project

1. Picking your first project should be considered carefully. It is the primary driver behind your learning so you want to make sure you're interested in the work at hand.
2. Once you have selected the topic of your first project, or have decided to join an already ongoing one, you will want to recognize the goals of your project.
3. This step is also very important, as you will be learning skills in Tableau based off the needs of your project.
 - a. For example, this summer I dealt with a project on portfolio pocket margin, which deals with analyzing all cash inflows and outflows of products (including those not on invoices), to measure true product profitability. After some research online, I came across an effective method called waterfall analysis to properly display this important metric. Because my project needs required this, I could learn a whole new form of financial data analysis, along with furthering my skills in Tableau during the process, and becoming more familiar with the software.
4. Looking up videos, reading articles, staying active on forums, and just playing around with Tableau are great ways to enhance this experience. Going through these steps yourself, and experiencing both success and failure are the best ways to ensure you understand the fundamentals of Tableau.

Continuing Your Learning

1. After finishing your first project, you should be fairly comfortable using Tableau and possibly have learned unique methods for data analysis that were required by your project.
2. Try to further your learning by picking a new project that will require you to learn different methods than you were just exposed to.
3. Staying proactive is the best way to continue maintaining current skills while developing new ones.

4. Look up examples of other people's projects online for any inspiration, it's amazing some of the things you can find.
5. Do not be afraid to ask for help. While it is important to tackle challenges on your own to develop full understandings of topics and analytics, do not hesitate to reach out on an online forum or someone in the Lehigh Data Science group to see if they can help. We are all here to learn from and help each other, and to create an open environment to foster our learning of the fast-growing field of data science.